

ABSTRACT OF THE DISCLOSURE

In a method for treating cancer, a series of investigatory pressure waves of respective different preselected frequencies are generated in a patient so that the pressure waves are transmitted to a tumor through overlying tissues, while responsive oscillatory motion of the tumor and at least some internal tissues of the patient proximate to the tumor are monitored during this pressure wave generation. From the responsive oscillatory motion of the tumor and the internal tissues, a pressure wave frequency is determined which results in a resonant loading of the tumor and essentially leaves the internal tissues undamaged. Subsequently, treatment pressure waves are generated in the patient and have the determined pressure wave frequency and of an effective amplitude so that the tumor resonates with sufficient energy to mechanically destroy the tumor.